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Sheet	1	of	2
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**Complete if Known**

Application Number	10/637,108
Filing Date	August 8, 2003
First Named Inventor	Sandhu et al.
Group Art Unit	2824
Examiner Name	M. Lebentritt
Attorney Docket Number	3264.6US (92-0280.09/US)

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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\* Did not receive

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 2

**Complete if Known**

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Group Art Unit	2824
Examiner Name	M. Lebentritt
Attorney Docket Number	3264 6LIS (92-0280 09/LIS)

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
<i>ML</i>		EIZENBERG et al., "TiCN: A new chemical vapor deposited contact barrier metallization for submicron devices", Appl. Phys. Lett. 65 (19), 7 November 1994, pps. 2416-2418.	
<i>ML</i>		Peng et al., "Properties of CVD-W Overgrowth on PVD and MOCVD TiN Layers, IEEE, 5 <sup>th</sup> International Conference Proceeding on Solid-State and Integrated Circuit Technology, 1998, pps. 211-214.	

Examiner Signature	<i>[Signature]</i>	Date Considered	<i>8/10/04</i>
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Form PTO-1449  <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b>  <i>(Use several sheets if necessary)</i>		Docket Number (Optional) <b>3264.6US (92-0280.09/US)</b>  Applicant <b>Sandhu et al.</b>  Filing Date <b>August 8, 2003</b>		Application Number <b>Not yet assign d</b>  Group Art Unit <b>Unkn wn</b>			
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	3,637,320	01/1972	Wakefield et al.				
	3,807,008	04/1974	Reedy				
	4,035,541	07/1977	Smith et al.				
	4,497,874	02/1985	Hale				
	4,830,886	05/1989	Co et al.				
	4,960,732	10/1990	Dixit et al.				
	4,990,997	02/1991	Nishida				
	5,001,531	01/1001	Yamaguchi				
	5,049,975	09/1991	Ajika et al.				
	5,087,593	02/1992	Narula				
	5,132,756	01/1992	Matsuda				
<b>FOREIGN PATENT DOCUMENTS</b>							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	4-87328	06/1992	Japan				
	4-38875	02/1992	Japan				
<b>OTHER DOCUMENTS</b> <small>(Including Author, Title, Date, Pertinent Pages, Etc.)</small>							
		Wakefield et al., "Preparation of Titanium Carbonitride From Mono-, Di-, and Tri-Methyl Amines"; 4 <sup>th</sup> International Conference on CVD, Electrochemical Society, 1973, pps. 173-150.					
		Politis et al., "Preparation, Characterization and Superconducting Properties of TiN and TiCxNy Single Crystals Prepared By CVD"; 7 <sup>th</sup> International Conference on CVD, Electrochemical Society, 1979, pps. 289-299.					
		Raaijmakers et al., "Contact Hole Fill with Low Temperature LPCVD TiN", VMIC Conference 6/12-6/13/90, pps. 219-225.					
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Applicant <b>Sandhu et al.</b>				Filing Date <b>August 8, 2003</b>		Group Art Unit <b>Unknown</b>	

  

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	5,139,825	08/1992	Gordon et al.			
	5,178,911	01/1993	Gordon et al.			
	5,192,589	03/1993	Sandhu			
	5,246,881	09/1993	Sandhu et al.			
	5,384,289	01/1995	Westmoreland			
	5,496,762	03/1996	Sandhu et al.			
	5,536,947	07/1996	Klersy et al.			
	5,571,572	11/1996	Sandhu			
	5,723,382	03/1998	Sandhu et al.			
	5,893,758	04/1999	Sandhu et al.			
	6,081,034	06/2000	Sandhu et al.			
	6,291,340	09/2001	Sandhu et al.			

  

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				Applicant <b>Sandhu et al.</b>			
				Filing Date <b>August 8, 2003</b>		Group Art Unit <b>Unkn wn</b>	

  

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Form PTO-1449

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number (Optional)  
3284.6US (92-0280.09/US)Application Number  
Not yet assigned

Applicant Sandhu et al.

Filing Date August 8, 2003

Group Art Unit Unknown

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<i>PSL</i>	6,081,034	06/2000	Sandhu et al.			
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EXAMINER

*Michael J. Sandhu*

DATE CONSIDERED

*2/10/04*

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